



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,458	06/29/2006	Ralf Brederlow	I432.128.101/P31912	6035
25281	7590	05/14/2009		
DICKE, BILLIG & CZAJA FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			EXAMINER MORTELL, JOHN F	
			ART UNIT	PAPER NUMBER
			2612	
			MAIL DATE	DELIVERY MODE
			05/14/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,458	<b>Applicant(s)</b> BREDERLOW ET AL.	
	<b>Examiner</b> JOHN F. MORTELL	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2612

## **DETAILED ACTION**

### ***Status of the Application***

1. This application is proceeding pursuant to the applicants' request for continued examination (RCE), filed March 10, 2009. Claims 12-31 are pending in the application. The applicants have cancelled claims 1-11. The applicants have amended claims 12 and 22.

The applicants have also amended the drawings, the objection to the drawings is withdrawn.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 12-14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Marget et al. (US 4,712,153).

Regarding claim 12, Marget discloses:

an electronic component operable with an AC voltage (col. 2, lines 36-44; col. 5, lines 49-52), the electric component comprising:

at least one input (FIG. 2: D);

at least one output (FIG. 2: S1, S2);

and a pair of functionally identical electronic sub-components, wherein the functionally identical electronic sub-components are connected in parallel (FIG. 2: 1+, 1-);

Art Unit: 2612

wherein the at least one input of the electronic component is connected to a respective input of the two functionally identical electronic sub-components (FIG. 2: Q, Q complement);

wherein the at least one output of the electronic component is connected to a respective output of the two functionally identical electronic sub-components (FIG. 2: S1, S2);

wherein the electronic component is configured such that at the at least one output only one output signal of a first sub-component of the pair of functionally identical electronic sub-components can be picked up during a first half-wave of an AC voltage, whereas only one output signal of the second sub-component of the pair of functionally identical electronic sub-components can be picked up during a second half-wave of the AC voltage (col. 2, lines 36-44; col. 5, lines 49-52; FIG. 2).

Regarding claim 13, Marget teaches the electronic component of claim 12, which includes a pair of functionally identical electronic sub-components, and the inclusion of a plurality of pairs of functionally identical electronic sub-components is merely redundancy that does not provide a new or unexpected result and therefore, does not distinguish the component from the component recited in claim 12.

Regarding claim 14, Marget further discloses an electronic component wherein at least one pair of functionally identical electronic sub-components comprises one of logic-gates, inverters, and flip-flops. (FIG. 2: To)

Regarding claim 17, Marget further discloses an electronic component wherein the electronic sub-components of a pair of functionally identical electronic sub-components comprises a switch. (FIG. 2: To)

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found

Art Unit: 2612

in a prior Office action.

5. Claims 15, 18-20, 22-26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marget in view of Baude et al. (US PG Pub. 2004/0119504 A1).

Regarding claim 15, Marget does not disclose an electronic component wherein the electronic component comprises a coil.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil for the benefit of receiving radio frequency power from a reader unit. ([0005], [0051]; FIG. 10: 67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil, as taught by Baude, with the electronic component disclosed by Marget because it would enable the component to couple radio frequency power from a reader unit to an RFID tag.

Regarding claim 18, Marget does not disclose an electronic component wherein the electronic component is configured within an ID tag.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil for the benefit of receiving radio frequency power from a reader unit. ([0005], [0051]; FIG. 10: 58)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil, as taught by Baude, with the electronic component disclosed by Marget because it would enable the component to couple radio

Art Unit: 2612

frequency power from a reader unit to an RFID tag.

Regarding claim 19, Marget does not disclose an electronic component wherein the ID tag comprises memory for storing information.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a data circuit for the benefit of outputting data to a reader. ([0005], [0052]; FIG. 10: 70)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a data circuit, as taught by Baude, with the electronic component disclosed by Marget because it would enable the component to output data to a reader.

Regarding claim 20, Marget does not disclose an electronic component wherein the ID tag comprises an encoder for coding information.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises control logic and a data circuit for the benefit of encoding unique identification code. ([0005], [0058], [0059]; FIG. 10: 70, 72; FIG. 11: 70, 72)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises control logic and a data circuit, as taught by Baude, with the electronic component disclosed by Marget because it would enable the component to encode unique identification code.

Art Unit: 2612

Regarding claim 22, Marget discloses:

an electronic arrangement (col. 5, lines 44-48; FIG. 2) comprising:

a first sub-component with an input and an output (FIG. 2: 1+);

a second sub-component with an input and an output, wherein the first and the second sub-components are connected in parallel (FIG. 2: 1-);

an AC signal received by the inputs of the first and second sub-components, the AC signal having a first half-wave and a second half-wave (col. 2, lines 36-44; col. 5, lines 49-52);

means for providing an output from only the first sub-component during the first half-wave (col. 2, lines 36-44; col. 5, lines 49-52; FIG. 2) ; or

means for providing an output from only the second sub-component during the second half-wave (col. 2, lines 36-44; col. 5, lines 49-52; FIG. 2).

Marget does not disclose:

a read device;

an ID tag with an electric component comprising:

wherein the ID tag and read device are configured to communicate with each other without contact.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil that receives radio frequency power from a reader unit for the benefit of wirelessly outputting data to the reader unit. ([0005], [0051], [0052], [0054], [0060]; FIG. 10: 56, 58)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil that receives radio frequency power from a reader unit, as taught by Baude, with the electronic arrangement disclosed by Marget because it

Art Unit: 2612

would enable the arrangement to wirelessly output data to the reader unit.

Regarding claim 23, Marget further discloses an electronic arrangement wherein the first and second sub-components are functionally substantially similar. (FIG. 2: 1+, 1-)

Regarding claim 24, the above combination of Marget and Baude discloses the electronic arrangement of claim 23, which includes a pair of functionally identical electronic sub-components, and the inclusion of a plurality of pairs of functionally identical electronic sub-components is merely redundancy that does not provide a new or unexpected result and therefore, does not distinguish the arrangement from the arrangement recited in claim 23.

Regarding claim 25, Marget further discloses an electronic arrangement wherein at least one pair of functionally identical electronic sub-components comprises one of logic-gates, inverters and flip-flops. (FIG. 2: To)

Regarding claim 26, Marget does not disclose an electronic arrangement wherein the electronic component comprises a coil.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil for the benefit of receiving radio frequency power from a reader unit. ([0005], [0051]; FIG. 10: 67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a coil, as taught by Baude, with the electronic arrangement disclosed by Marget because it would enable the arrangement to couple radio frequency power from a reader unit to an RFID tag.

Regarding claim 28, Marget further discloses an electronic arrangement wherein the

Art Unit: 2612

electronic sub-component comprises a switch. (FIG. 2: To)

Regarding claim 29, Marget does not disclose an electronic arrangement wherein the ID tag comprises memory for storing information.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a data circuit for the benefit of outputting data to a reader. ([0005], [0052]; FIG. 10: 70)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises a data circuit, as taught by Baude, with the electronic arrangement disclosed by Marget because it would enable the arrangement to output data to a reader.

Regarding claim 30, Marget does not disclose an electronic arrangement wherein the ID tag comprises an encoder for coding information.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises control logic and a data circuit for the benefit of encoding unique identification code. ([0005], [0058], [0059]; FIG. 10: 70, 72; FIG. 11: 70, 72)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises control logic and a data circuit, as taught by Baude, with the electronic arrangement disclosed by Marget because it would enable the arrangement to encode unique identification code.

Art Unit: 2612

6. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marget in view of Baude and further in view of Seal (US 6,693,511 B1).

Regarding claim 16, the above combination of Marget and Baude does not disclose an electronic component further comprising a voltage limiter, which limits the AC voltage lying across an electronic sub-component of the pair of functionally identical electronic sub-components.

Seal, in the same field of endeavor, teaches radio frequency identification (RFID) tags comprising a pair of diodes acting as a symmetrical diode limiter for the benefit of stopping voltage overload from the stronger input level of a signal from a transponder. (col. 13, lines 41-46; FIG 17: 1703, 1705)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the pair of diodes acting as a symmetrical diode limiter, as taught by Seal, with the electronic component of the above combination because it would enable the component to stop voltage overload from the stronger input level of a signal from a transponder.

Regarding claim 27, the above combination of Marget and Baude does not disclose an electronic arrangement wherein the electronic component further comprises a voltage limiter, which limits the AC voltage lying across an electronic sub-component of the pair of functionally identical electronic sub-components.

Seal, in the same field of endeavor, teaches radio frequency identification (RFID) tags comprising a pair of diodes acting as a symmetrical diode limiter for the benefit of stopping voltage overload from the stronger input level of a signal from a transponder. (col. 13, lines 41-46; FIG 17: 1703, 1705)

Art Unit: 2612

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the pair of diodes acting as a symmetrical diode limiter, as taught by Seal, with the electronic arrangement of the above combination because it would enable the arrangement to stop voltage overload from the stronger input level of a signal from a transponder.

7. Claims 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marget in view of Baude and further in view of Bayron et al. (US 5,769,051).

Regarding claim 21, Marget does not disclose an electronic component wherein the encoder is configured such that it can be used for pulse-coding.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises an encoder configured such that it can be used for pulse-coding for the benefit of outputting data to a reader unit. ([0057], [0060]; FIG. 11: 72, 76)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises an encoder configured such that it can be used for pulse-coding, as taught by Baude, with the electronic component disclosed by the above combination because it would enable the component to output data to a reader unit.

The above combination of Marget and Baude does not teach an electronic component wherein the encoder is configured such that it can be used for time-coding.

Bayron, in the same field of endeavor, teaches a passive transponder wherein the encoder is configured such that it can be used for time-coding for the benefit of enabling a keychain unit

Art Unit: 2612

to operate as a passive transponder for interfacing with an engine controller. (col. 2, lines 33-34, 64-65; col. 6, lines 57-64; FIG. 7: 96)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passive transponder wherein the encoder is configured such that it can be used for time-coding, as taught by Bayron, with the electronic component disclosed by the above combination because it would enable the component to operate as a passive transponder for interfacing with an engine controller.

Regarding claim 31, Marget does not disclose an electronic arrangement wherein the encoder is configured such that it can be used for pulse-coding.

Baude, in the same field of endeavor, teaches logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises an encoder configured such that it can be used for pulse-coding for the benefit of outputting data to a reader unit. ([0057], [0060]; FIG. 11: 72, 76)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the logic circuitry powered by alternating current power sources, wherein an electronic component in an RFID tag comprises an encoder configured such that it can be used for pulse-coding, as taught by Baude, with the electronic arrangement disclosed by the above combination because it would enable the arrangement to output data to a reader unit.

The above combination of Marget and Baude does not teach an electronic arrangement wherein the encoder is configured such that it can be used for time-coding.

Bayron, in the same field of endeavor, teaches a passive transponder wherein the encoder is configured such that it can be used for time-coding for the benefit of enabling a keychain unit

Art Unit: 2612

to operate as a passive transponder for interfacing with an engine controller. (col. 2, lines 33-34, 64-65; col. 6, lines 57-64; FIG. 7: 96)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passive transponder wherein the encoder is configured such that it can be used for time-coding, as taught by Bayron, with the electronic arrangement disclosed by the above combination because it would enable the arrangement to operate as a passive transponder for interfacing with an engine controller.

### ***Response to Arguments***

8. The applicants' arguments with respect to claims 12-31 have been considered but are moot in view of the new grounds of rejection stated above.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN F. MORTELL whose telephone number is (571)270-1873. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2612

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JM/

/Daniel Wu/  
Supervisory Patent Examiner, Art Unit 2612